Technical Report 69-2

Student Attitudes and Foreign Language Learning

by

Alfred I Fiks and George H. Brown

HumRRO Division No. 7 (Language and Area Training)

March 1969

Prepared for

Office, Chief of
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The George Washington University
HUMAN RESOURCES RESEARCH OFFICE

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Work Unit REFILL

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FOREWORD

The purpose of this research conducted by the Human Resources Research Office was to examine the importance of student attitudes in foreign language learning. Although the study was intended more as an exploratory effort than as a definitive project on the underlying question of student motivation, some tentative implications can be noted for selection as well as course management.

The research activities were carried out as part of Work Unit REFILL, which is completed with the publication of this report. The research was performed by Division No. 7 (Language and Area Training); Dr. Arthur J. Hoehn is Director of Research for the Division. The data for the present study were collected between November 1964 and January 1966.

Members of the REFILL research group were Dr. Alfred I. Fiks, Work Unit Leader, Dr. George H. Brown, and Mr. Jerome P. Corbino.

Appreciation is expressed for the excellent cooperation received from various staff members of the Defense Language Institute and its affiliated university and commercial language school programs.

Other REFILL publications include Modern Approaches to Foreign Language Training: A Survey of Current Practices, HumRRO Technical Report 67-15, by George H. Brown and Alfred I. Fiks, December 1967; "Foreign Language Programmed Materials: 1966," by Alfred I. Fiks, in Modern Language Journal, vol. LI, no. 1, January 1967 (also published as HumRRO Professional Paper 1-67, January 1967); "Some Attitudinal Factors in Foreign Language Learning," by Alfred I. Fiks, paper for meeting of Southern Society for Philosophy and Psychology, Roanoke, Va., March 1967; included in Abstracts of the XVIIth International Congress of Psychology, vol. II, Moscow, U.S.S.R., 1966; and "Course Density and Student Perception," by Alfred I. Fiks and J.B. Corbino, in Language Learning, vol. XVII, nos. 1 and 2, 1967.

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Meredith P. Crawford
Director
Human Resources Research Office

SUMMARY AND CONCLUSIONS

Military Problem

Foreign language training has become an important aspect of modern military instruction, since large numbers of personnel are serving in advisory and supportive capacities requiring contact with foreign nationals. Although it is known that student achievement in foreign language courses is not wholly explainable in terms of intellect and aptitude, it is not clearly understood what other factors may be operating to increase or inhibit learning capability.

Research Objective

The goal of this research was to determine what, if any, implications data on student attitudes and motivational factors might contain for foreign language student selection and course-administration purposes in the Defense Language Institute (DLI) system.

Specific research interest was focused on the level of DLI student attitudes, what attitude shifts occur as courses progress, the relation between attitudes and foreign language performance, liked and disliked course features, association between attitudes and training method, and some ramifications of volunteering for foreign language study. Secondary research interest was directed at student biographical factors, foreign language aptitude, and training-system features, as they relate to achievement criteria.

Method

Three categories of data were collected: attitude-motivational data, secondary data, and criterion data. Attitudes were assessed with a 41-item questionnaire which measures four attitude domains: *Interest* (in foreign language as a subject matter); *Utilitarian Orientation* (the perceived practical, career benefits from foreign language study); *Xenophilic Orientation* (desire to associate with foreign cultures); and *Course Satisfaction* (satisfactions and complaints expressed about various course features). Whether trainees had or had not volunteered for foreign language study was ascertained.

Secondary variables studied were age, military rank, foreign language aptitude, the training environment or milieu, the language under study, and the type of course enrolled in.

The criterion data consisted of final course scores, Army Language Proficiency Test – Listening Comprehension (ALPT-L), Army Language Proficiency Test – Reading Comprehension (ALPT-R), and course completion figures.

The sample consisted initially of 326 military students (diminishing to about 270 for such reasons as illness, disciplinary and administrative action, and military contingencies) at eight DLI Centers or DLI-affiliated programs studying nine different languages. Attitude questionnaires were administered twice to most of the students, once in the first third of their courses, and again during the last third.

Findings

Attitude Level. The trainees, on the whole, appeared to be interested in foreign language study, to perceive its utility, to be positively oriented to other cultures, and to be fairly satisfied with their courses.

Attitude Shifts. The favorableness of student attitudes declined from early to late in courses on three of the four scales: Interest, Utilitarian Orientation, and Course Satisfaction. By contrast, Xenophilic Orientation remained constant or, in some samples, showed a slight increase.

Attitudes and Achievement. Two of the attitude subscales, Interest and Xenophilic Orientation, were found to correlate significantly (though quite modestly) with achievement criteria.

Specific Satisfactions and Complaints. The single greatest source of student satisfaction was the glamour and status associated with study of foreign languages and cultures.

The single greatest complaint theme was excessive difficulty, pressure, pace of instruction.

The major suggestion themes were more attention to individual students and greater emphasis on culture-area study.

Attitudes and Training Method. Student Interest and Course Satisfaction dropped more sharply where the training method involved *more* memorization and reading, and *less* choral drilling and intonation exercises than in other schools.

Volunteering. Of the four criteria only final score showed a slight superiority for volunteers over nonvolunteers.

A possible interaction effect between volunteering and foreign language aptitude was observed in end-of-course ALPT-L scores, such that among nonvolunteers, higher aptitude students subsequently scored higher on the criterion than low-aptitude students. However, a reverse trend appeared for volunteers.

Volunteers with lower foreign language aptitude are the subgroup least satisfied with the course.

Age of Students. Student age was not significantly related either to foreign language aptitude scores or to achievement scores, although there was a tendency for older students to score lower on both of these measures.

Military Rank of Students. Officers were found lower but more variable in foreign language aptitude than enlisted men. On the criterion measures, however, officers surpassed enlisted personnel, especially on the ALPT-R, with enlisted men the more variable.

Enlisted men had a greater utilitarian orientation in their foreign language study than officers did. Officers were more xenophilically oriented than enlisted men were.

Foreign Language Aptitude. Despite the restricted range of ability in these prescreened students, foreign language aptitude, as measured by the Modern Language Aptitude Test, was found to be significantly related to two or three of the quantitative performance criteria in five of the six samples measured.

Milieu. Of the three types of training settings (military installation, university campus, and commercial language school) students at military installations achieved the highest ALPT-L and ALPT-R scores. Such students were also more interested in foreign language study and more utility-oriented than students at commercial schools.

Trainees in university settings were highest in student attrition rate, intermediate in their ALPT-L performance, and low in their ALPT-R performance.

Students in commercial schools had the lowest attrition rate and ALPT-L scores and were intermediate in their ALPT-R scores.

Course Type. Students in "regular" courses surpassed those in "auditory comprehension" courses on the ALPT-R. No compensating advantage for the latter group on the ALPT-L was found.

Conclusions

(1) Student attitudes toward foreign language learning in DLI classrooms are measurable in the form of various components (e.g., Interest, and Xenophilic Orientation), all of which appear to be fairly high in the sample measures.

(2) The "glamour" and "status" associated with foreign language study was the single greatest source of student satisfaction with their courses.

(3) The impression of many language teachers to the effect that student motivation typically declines as the course progresses was substantiated by data obtained in this research.

(4) Two of the attitude components studied in this project, Interest and Xenophilic Orientation, correlated significantly, though quite modestly, with achievement indices. Future research might be directed at improving the predictive validity of these subscales.

CONTENTS

Tables

Figures

Student Attitudes and Foreign Language Learning

INTRODUCTION

Military Problem

Student intelligence, specific aptitude, and/or prior scholastic achievement tend to account for approximately half the variation in foreign language attainment (1, 2). Attention to other factors, such as motivation, attitudes, and morale, is therefore indicated in attempting to account for the remaining individual differences in proficiency attained.

The potential utility of considering such affective components in learning a second language cuts across military and civilian training efforts. For military as well as civilian students, improvement in selection schemes and the provision of incentives during training would contribute to more effective use of limited training facilities. Few will dispute that student attitudes and the possibility of their measurement remain to be worked out. The present research is intended as an effort toward this goal in the framework of a military training situation.

Related Research

Several studies have identified and analyzed affective dimensions of student motivation and attitudes in foreign language learning. Gardner and Lambert (3) clearly established through factor analysis that a motivation factor is one of two characteristics related to second-language acquisition (the other being linguistic aptitude). Nida (4), focusing on the motivation factor, suggested that motivation for second-language study is itself not an undifferentiated global wish to learn a language. Rather, he saw a desire to communicate and sensitivity to the second language group as specific motivational factors involved in the degree of proficiency which students achieve.

Significant positive correlations between attainment and certain kinds of motivation in adolescent students were reported by Lambert (5). He describes two kinds of orientations for language learning. One is an "instrumental orientation"—the belief that one's utilitarian or practical goals will be furthered by achieving skill in a foreign language. The other is an "integrative orientation"—the desire to be like members of the cultural group who speak the language under study. Such data indicated that students with an integrative orientation were more successful in language learning than those with an instrumental orientation.

Pimsleur (2) was able to discriminate between normal students and under-achievers[1] on the basis of several motivation-interest-attitude scales or items, although he points out that student motivation in the foreign-language classroom may be either cause or effect. He found six instrumental-integrative orientation items which discriminated between the normal and the under-achiever samples. The differences were in the expected direction: Under-achievers tended not to perceive any relevance of foreign language skills to their lives.

[1]A student whose grade in a modern foreign language is at least one grade point lower than his average grade in other major subjects.

Objectives

This study was conceived to be more exploratory than definitive. The major goals were to:

(1) Assess student attitudes at various Defense Language Institute (DLI) centers.

(2) Describe changes in attitudes as courses progress.

(3) Determine the relationship, if any, between attitude components and student performance.

(4) Identify specific sources of student satisfaction and dissatisfaction.

(5) Ascertain whether any association exists between student attitudes and training methodology.

(6) Determine whether students who have volunteered for language training differ from nonvolunteers in their foreign language achievement.

METHOD

Attitude Measures

The research instrument used was a questionnaire, the Language Interest Scale, consisting of items borrowed or adapted from Pimsleur (2) and Lambert et al. (6), or developed in the research. The items in the scale measured four different components of overall attitude: Interest, Utilitarian Orientation, Xenophilic Orientation, and Course Satisfaction.

The scale was pretested on a group of 63 students studying Mandarin Chinese. On the basis of the data obtained, the items relating to Interest, and Utilitarian and Xenophilic Orientation were tested for internal consistency; as a result, the items used in computing the scale were reduced from an original 54 to 41. The items on Course Satisfaction were not subjected to selection on the basis of internal consistency because all the data on student perception of isolated course features were of interest in the research.

In item analysis, correlation coefficients were computed by correlating individual items with the total scores obtained on each group of questions that pertained to the four components of overall attitude measured (7, p. 494). The individual items in question are excluded from the total in computing the correlations.

Interest

Items in this category were written to determine the strength of a student's interest in foreign language as a subject matter and his willingness to expend effort in such study. From an initial pool of 13 questions, six internally valid items were identified by item analysis (Appendix A). Item Interest subscale correlation coefficients were each significant at $p < .05$.

Five of the questions are multiple-choice items with differential scoring of the response alternatives. A sample item is: "If for any reason my attendance in this language course had to be interrupted for a prolonged period (e.g., because of serious illness, a death in the family or something of the sort), I would try very hard to get reinstated in the course as soon as possible." The response alternatives were (a) definitely, (b) probably, (c) possibly, (d) probably not, (e) definitely not; they were socred 4, 3, 2, 1, and 0.

The first item on this scale is open ended and reads as follows: "If I had the necessary funds and had to pay for this course out of my own pocket, the maximum amount I would be willing to pay is $_____." A scoring key was developed for this item on the basis of the distribution of answers in the early

student sample. The higher the price the student said he would be willing to pay, the greater his presumed interest, and hence the higher the score assigned to his response.

The maximum possible score on the Interest subscale was 23, and the minimum possible score, 2. A neutral Interest score would be midway between the limits, or 12.5. The reliability coefficient of this subscale was computed to be a moderate but significant .44 ($N = 176$; $p < .001$). The N of 176 refers to the total number of subjects for whom complete data were available. For another estimate, the test-retest correlation of this scale ranged at five schools from $r = .27$ to $r = .51$.

Utilitarian Orientation

This subscale was designed to measure the extent to which a student believed foreign language proficiency would advance his pragmatic career goals. It closely resembles the instrumental orientation of Lambert et al. (6). Starting with seven items, two were eliminated in pretest as invalid, leaving five questions in the final instrument (Appendix A). Item Utilitarian subscale correlation coefficients were significant at $p < .05$ for four of the questions, $p < .10$ for one of them.

These five questions all provide multiple-choice responses. A sample item is: "A knowledge of the _____ language will probably help me advance in my military career." The response alternatives were (a) I am certain of it, (b) agree very strongly, (c) agree somewhat, (d) not sure, (e) disagree somewhat, (f) disagree very strongly, (g) nonsense! The scoring values assigned to these alternatives were 6, 5, 4, 3, 2, 1, and 0.

The maximum possible score on this scale was 27 and the minimum possible, 3; the scalar neutral score was therefore 15. The reliability of this scale was .38 ($N = 176$, $p < .001$) and ranged from $r = .54$ to $r = .81$ on test-retest data.

Xenophilic Orientation

The purpose of this subscale was to assess the strength of a student's desire to know, associate, and identify with cultures other than his primary one. Xenophilia, by definition, carries implications of worldmindedness and non-ethnocentrism. The subscale is related to, but more general than, the integrative orientation of Lambert et al. (6). From a pool of 12 items, five were shown to have internal consistency (Appendix A). Item Xenophilic subscale correlation coefficients were significant at $p < .01$ in four instances, $p < .10$ in the fifth.

All of these were multiple-choice items. A sample item is: "Most of the under-developed countries of the world will probably stay under-developed no matter how hard we try to help them because of the personality characteristics of their people." The response alternatives were (a) agree very strongly, (b) agree somewhat, (c) not sure, (d) disagree somewhat, (e) disagree very strongly. Scoring weights were 1, 2, 3, 4, and 5.

The maximum possible score on this scale was 25 and the minimum was 5; the neutral point was 15. Subscale reliability was .31 ($N = 176$, $p < .001$) and $r = .39$ to $r = .61$ on test-retest data.

Course Satisfaction

This subscale contained 22 multiple-choice items of two types (Appendix A). In Items 1-9 the student was asked to express the degree to which he likes the course as a whole and various specific features of the course he is

taking. A sample item is: "On the whole, the text materials used in this course are: (a) excellent, (b) pretty good, (c) satisfactory, (d) rather poor, (e) extremely poor." These alternatives were scored 5, 4, 3, 2, and 1.

In Items 10-22 the student was asked to evaluate the adequacy with which the course embodies given characteristics. For example, one item reads as follows: "The amount of emphasis this course places on 'reading' is: (a) definitely too much, (b) somewhat too much, (c) about right, (d) not quite enough, (e) not nearly enough." For the purpose of generating a total Course Satisfaction score in combination with Items 1-9, these response options were scored 1, 2, 4, 2, and 1. The maximum possible Course Satisfaction score based on the two types of items was 98 and the minimum was 21. Reliability was .55 ($N=176$, $p<.001$) from item-total correlations and $r=.27$ to $r=.87$ from test-retest data.

Responses to 19 of the 22 Course Satisfaction items dealt with specific course characteristics and were subsequently analyzed individually to afford insight about particular student satisfactions and complaints. For this purpose, the response alternatives in Items 10-22 were recoded 1, 2, 3, 4, and 5. In all cases 1 indicated maximum perceived excess of the feature and 5 indicated maximum perceived insufficiency of the course characteristic.

Course satisfaction and dissatisfaction were probed further with the last three items on the questionnaire (Open-End Questions 1-3). The student was asked to indicate (a) what he liked least about the course he was taking, (b) what he liked most about it, and (c) what suggestions he had for improving the course. Responses to these questions were thematically categorized and a code was developed for analysis. A total of 29 such categories emerged for the responses concerning features least liked about the course, 19 for the answers concerning features liked most, and 30 for the suggestions for improvements in the course. A listing of all the coding categories used appears in Appendix B.

Student Population and Samples

The population from which the various samples were drawn was the student body of the Defense Language Institute and of the various training programs it sponsors. The training centers and programs from which the current student samples were drawn constituted a subset of the institutions surveyed in a companion project to the present research.[1] One language class (or section) at each of eight training centers was selected. The eight centers consisted of three university programs, three commercial schools, and two military installations. Since interschool comparisons are not relevant to the objectives of this study, each school will be referred to in this report only by an arbitrarily assigned number.

With one or two exceptions, at each center the class was one in the language having the highest student enrollment. Secondly, the class or section chosen was near the beginning of the course at the time of the researchers' first visit. The total initial sample contained 326 students, studying nine different languages. At the time of the second administration of the questionnaire, the total N had decreased to 270, principally because the students at the three commercial schools ($N=50$) could not be tested a second time. Illness, disciplinary actions, military contingencies, and administrative actions also accounted for loss of men.

[1]This companion project is reported in Brown and Fiks (8).

It should be noted that, with rare exceptions, only students having language aptitude scores at the 60th percentile or higher are accepted for DLI language courses. Consequently, the sample of students in this research project represents only the top 40% of the general population in terms of aptitude. Any correlations emerging from this research might well be higher if based on a sample not restricted to aptitude.

Administration of the Questionnaire

In line with the stated research objectives, the questionnaire was administered twice to each sample, except at the commercial schools where readministration was not practicable. The research plan called for the first assessment of attitudes to be made in the first third of the course progression and the second assessment to be made in the last third of the course.[1] The number of students at each installation, time points, and various other information about the data-gathering activities are presented in Table 1.

Table 1

Administration of Attitude Questionnaire

School	Language	Course Length (Weeks)	Proportion of Course Completed at Time of:		*N*
			First Administration	Second Administration	
1	Mandarin Chinese	32	.25	.78	63
2	Russian	37	.14	.92	62
3	Russian	37	.14	.92	82
4	Mandarin Chinese[a]	47	.40	.96	13
		47	.21	.79	18
		47	.11	.70	19
5	Russian	36	.25	.94	19
6,7,8[b]	Miscellaneous	12-47	.46[c]		50
					Total 326

[a]Three different sections of the group were sampled.
[b]Three commercial language schools, each with a small DLI study body.
[c]Median proportion of course completed at time of single administration.

The first administration of the questionnaire was supervised by a researcher, who explained the general purpose of the activity. He emphasized that individual student's responses would never be made known to the instructor or other academic or military authorities, and hence could not influence the student's grades or military or academic career. The instructors left the room during administration of the questionnaire. Most students finished within 10 or 15 minutes, but a few required as much as 50 minutes.

At the time of the second administration, the researcher informed the students that the retest was to determine their current attitudes. He urged the students not to make any effort to be consistent with their earlier responses, since only their opinions and attitudes at the time of each testing were pertinent.

[1]This condition was met in all cases but one.

It was possible that the first test administration may have sensitized students to observe certain features of the course more carefully than they otherwise would, or perhaps to be more critical of certain features of the course. Therefore, a single administration of the attitude instrument was given to a control group of 44 students in the Russian program at School 2 at Time 2. These students were all in a class which was about five weeks from the end of the 37-week course. It was considered that any systematic significant differences which might appear between the scores of this group and those of the experimental group at this university might be attributable to sensitizing effects of the initial administration.

Criteria

Four types of student achievement data were collected: final course scores, scores on the Listening Comprehension and on the Reading Comprehension portions of the Army Language Proficiency Test, and course completion-dropout information.

Final Course Scores

This measure was a percentage score assigned to each student by his instructor(s) at the end of the course on the basis of his classroom performance and quiz grades.

Army Language Proficiency Test - Listening Comprehension (ALPT-L)

This part of the ALPT contains 60 items in which the student hears a stimulus item presented on magnetic tape and responds by choosing the correct printed multiple-choice answer. The following types of items are included (9):

(1) Contextual Vocabulary, in which a short sentence is spoken in the foreign language. The examinee selects the one English word which is a translation of a word or phrase of the sentence.
(2) Sentence, in which a sentence is spoken in the foreign language. The examinee selects its best translation.
(3) Situational, in which a situation is presented in a sentence or short paragraph in a foreign language. The examinee answers a multiple-choice question in English concerning the situation.

The reliability of this part of the ALPT for Russian was .95 and for Mandarin Chinese .93.

Army Language Proficiency Test - Reading Comprehension (ALPT-R)

This part of the ALPT contains an additional 60 items in which the student reads printed material and responds by selecting one of several printed answers. The types of items included are:

(1) Vocabulary in Context, in which a sentence is presented in the foreign language with a word or phrase underlined. The examinee chooses the best translation. Homonyms, idioms and colloquialisms are among the words or phrases used.
(2) Sentence, in which a sentence is presented in the foreign language. The examinee chooses the best English translation.
(3) Situational, in which a situation is presented in a sentence or short paragraph in a foreign language. The examinee answers a multiple-choice question in English concerning the situation.

The reliability of this part of the ALPT for both Russian and Mandarin Chinese was .96.

Course Completion

The fourth criterion is clearly confounded by many other factors besides success or failure in foreign-language study. Such considerations as health, military contingencies, and personal responsibilities on occasion intervene to force a student to withdraw from a course. Conversely, some schools may try to retain a failing student and get him to complete his course.

Nevertheless, in utilizing this criterion, our premise was that a higher incidence of students completing a course is generally an indicator of greater average achievement and better average student attitudes.

RESULTS

Data will be presented in this section on (a) current student attitudes at DLI centers and how they are affected by course progression, (b) the relationship among attitude subscales, (c) the relationship between attitudes and aptitudes, (d) the relationship between attitudes and foreign language achievement, (e) the "most liked" and "least liked" course features, (f) the relationships between attitudes and training methodology, and (g) some ramifications of volunteering for foreign language study. Secondary findings with regard to biographical factors, nature of the criteria, and test-retest control are reported in Appendices C, D, E, F, and G.

Level of Student Attitudes

The means of the scores on the four subscales of the questionnaire are given in Table 2. The data show that, in general, the attitude level of the students at the various schools was fairly high: No mean value falls on the negative side of any scale neutral point. On the whole, these trainees appear to be interested in foreign language study, perceive its utility, are positively oriented to other cultures, and are fairly satisfied with their course.

Table 2

Scores on the Attitude Subscales[a]

School	*N*	Interest		Utilitarian Orientation		Xenophilic Orientation		Course Satisfaction	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	51	17.5	2.9	21.5	3.1	21.1	2.9	78.5	8.1
2	52	16.0	2.9	21.4	2.7	20.4	2.9	70.9	11.0
3	64	18.1	2.8	21.6	2.9	20.6	2.6	74.6	8.8
4	40	17.6	2.6	20.8	3.7	21.9	2.2	67.2	10.6
5	16	17.8	2.2	18.0	4.9	22.4	1.6	71.5	13.2
6,7,8[b]	49–50	16.3	2.2	18.7	4.1	21.0	2.6	63.8	11.9
Maximum Possible Score		23		27		25		98	
Minimum Possible Score		2		3		5		21	
Scale Midpoint		12.5		15.0		15.0		59.5	

[a]The means were derived from the combined scores of both times the questionnaire was administered, except as noted.

[b]The single-administration data from the three commercial schools were merged.

Differences among the groups are treated in Appendix E. It may be noted here, however, that the School 3 group has the highest mean Interest and Utilitarian Orientation scores, School 5 the highest mean Xenophilic Orientation score, and School 1 the greatest average Course Satisfaction. Similarly, the group lowest in Interest is not lowest in Utilitarian Orientation or Course Satisfaction, and so

on. Thus, these data are consistent with the view that student "attitude and motivation" in the foreign language classroom consists of specific attitude components rather than a gross motivational state.

Attitudes as Courses Progress

Reports by foreign language instructors of their impressions often allude to a drop in student "morale," "enthusiasm," or "motivation" as courses progress from beginning to end. Data on this subject from the five schools where they were collected are presented in Table 3. In corroboration of teacher impressions, statistically significant decreases were observed on three of the subscales—Interest, Utilitarian Orientation, and Course Satisfaction—from the first to the second administration. There was no similar dropoff, however, in the students' Xenophilic Orientation. (Four of the five schools actually showed small numerical increases in the means, with no difference in the fifth.) These trends are illustrated in Figure 1.

Table 3

Shift in Mean Student Attitudes From First to Second Administration at Five Schools

School	*N*	Interest		Utilitarian Orientation		Xenophilic Orientation		Course Satisfaction	
		First Admin.	Second Admin.	First Admin.	Second Admin.	First Admin.	Second Admin.	First Admin.	Second Admin.
1	51	17.5	17.4	22.2	20.8	21.0	21.2	79.9	77.0
2	52	16.7	15.3	21.5	21.2	20.2	20.5	75.5	66.2
3	64	18.0	18.2	21.8	21.4	20.6	20.6	74.8	74.5
4	40	18.4	16.8	21.5	20.2	21.8	22.0	71.2	63.3
5	16	18.2	17.2	18.8	17.2	22.3	22.5	72.6	70.6
F Ratio:									
Time 1 vs. Time 2		9.6		13.6		<1.0		29.2	
p		<.01		<.01		NS		<.01	

These data demonstrate that not all components of student attitude fall off as foreign language courses progress. Moreover, for those attitude components which do show a decrease, the size of the drop differs for the various schools. Possible explanations for the variations in the decreases will be examined in a later section of this report. A test to support the necessary assumption that the first administration had no biasing effects on responses on the second administration of the questionnaire is described in Appendix F.

Relationships Among the Attitude Subscales

The decision to assess foreign language motivation in terms of four different factors or components, rather than as a unitary motivational state, was based partly on a priori grounds. It is pertinent to ask whether the data obtained in the research support this conceptualization of foreign language motivation. To the extent that our attitude subscales do indeed measure different, independent facets of motivation, intercorrelations among the subscales should be low.

The intercorrelations among the subscales are shown in Table 4. Correlations are presented separately for each school, and also for the average of the various schools. Examination of the mean correlations shows that most are

Student Attitudes at Early and Late Points in Their Foreign Language Course

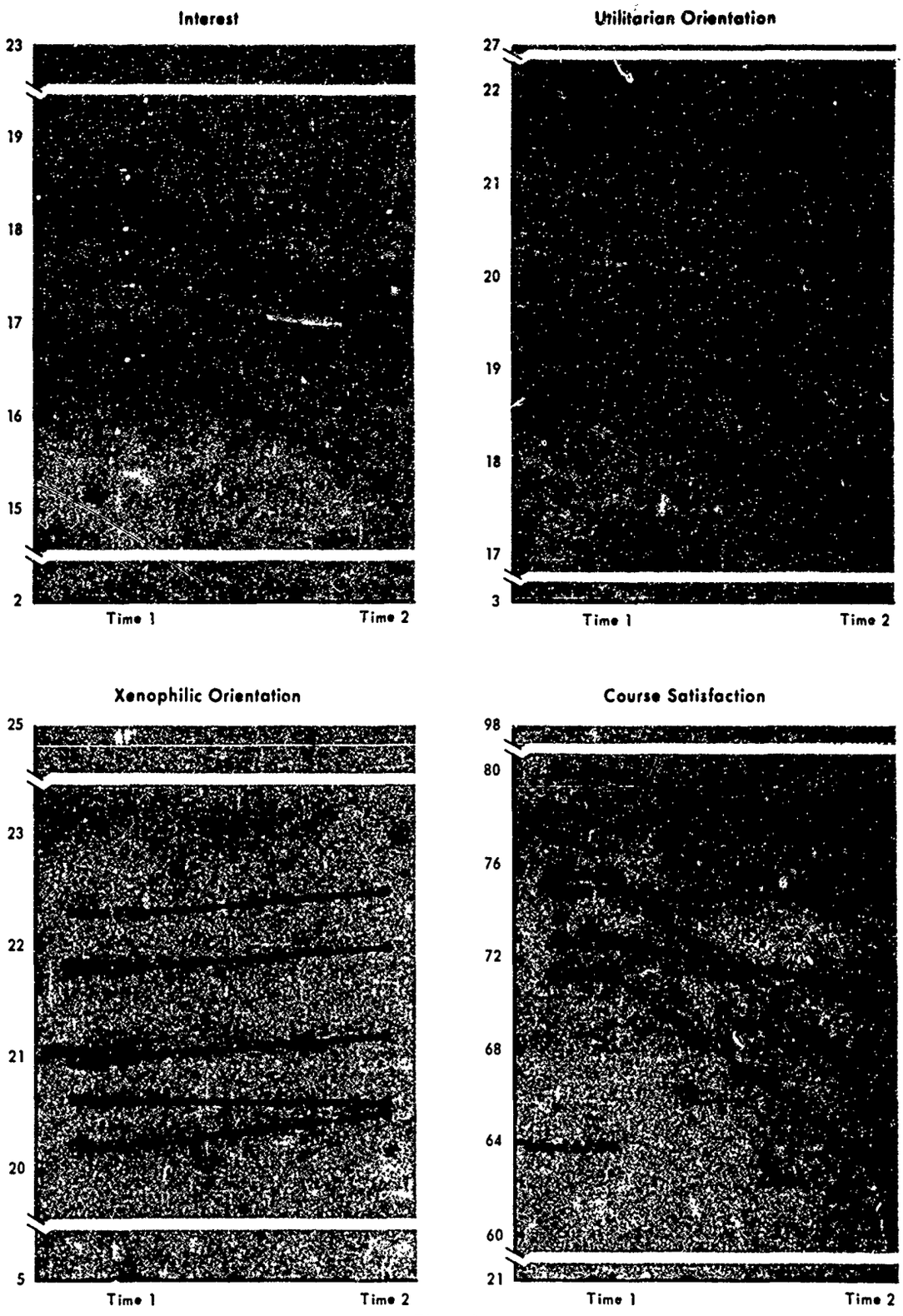

Figure 1

very low, although Interest is seen to correlate significantly with each of the other subscales. Thus, Interest (willingness to expend effort in foreign language study) appears to be slightly associated with Utilitarian Orientation, Xenophilic Orientation, and Course Satisfaction.

Table 4

Intercorrelations Among the Attitude Subscales (Time 1)

Subscale Correlation	School						Mean[b] Correlation (N=324)
	1 (N=63)	2 (N=61)	3 (N=82)	4 (N=50)	5 (N=18)	6,7,8[a] (N=50)	
Interest with:							
Utilitarian	.20	.16	.38	.26	.23	.24	.25*[c]
Xenophilic	.28	.19	.27	.00	−.36	.24	.18*
Course Satisfaction	.23	.11	.46	.51	.35	.36	.34*
Utilitarian with:							
Xenophilic	−.14	.08	.01	−.24	−.15	.30	.00
Course Satisfaction	−.14	.21	.27	.15	.25	.16	.15
Xenophilic with:							
Course Satisfaction	.05	−.01	.18	−.15	−.35	.07	.02

[a]The data for the three commercial schools were combined.
[b]The means were computed using the z transformation method.
[c]* indicates significance at the .05 level.

The correlation of Xenophilic Orientation with the other subscales is extremely low, which suggests that this subscale measures a somewhat unusual dimension of motivation.

The intercorrelations shown in Table 4 would probably be appreciably higher were it not for the low reliability of the separate subscales. It is entirely possible that, with greater reliability in the subscales, the intercorrelation data would indicate much greater overlap than they now do.

Relationships Between Attitudes and Aptitudes

It might be supposed that the four attitude subscales are closely related to language aptitude, that the amount of motivation students have for language study depends upon their degress of language aptitude. Therefore, to make sure that our subscales are measuring something distinct from aptitude, correlations were computed between scores on the Modern Language Aptitude Test (MLAT) and scores on each of the four attitude subscales (Table 5).

The bulk of the correlations are quite low. The mean $\underline{r}$s are also quite low although that between the MLAT and Xenophilic Orientation scores ($\underline{r} = .17$) does reach statistical significance. These data indicate a significant though slight tendency for students who are interested in foreign cultures to have higher language aptitude than students who lack this interest.

Although the bulk of the $\underline{r}$s in Table 5 are quite small, there is one notable exception. The correlation between the MLAT and Course Satisfaction scores at School No. 1 is −.37. This $\underline{r}$ is notable not only because of its numerical size but also because it is negative. This significant negative correlation indicates that at School No. 1 highly apt students tended to be less satisfied with their course than lower aptitude students. This could be due to the fact that students at this

Table 5

Correlations Between Foreign Language Aptitude (MLAT) and Attitude Subscales (Time 1)

Correlation Between MLAT and:	School						Mean[b]
	1 (*N*=50)	2 (*N*=52)	3 (*N*=63)	4 (*N*=40)	5 (*N*=16)	6,7,8[a] (*N*=48)	
Interest	.03	−.05	.01	−.05	.05	.27	.05
Utilitarian	−.09	.08	−.13	−.18	.05	.16	−.03
Xenophilic	.17	.19	.07	.18	−.15	.34	.17*[c]
Course Satisfaction	−.37	.16	−.20	.02	.20	.01	−.07

[a]The data for the three commercial schools were combined.
[b]The means were computed using the *z* transformation method.
[c]* indicates significance at the .05 level.

school are known to have been specially selected both for aptitude scores and for subjectively appraised interest in foreign language study. The course itself, however, was strongly oriented toward the development of comprehension skills and gave little attention to other aspects of language study. It is possible that these high aptitude students were dissatisfied because the course they were taking did not permit full utilization of their aptitude for other facets of language skills.

The fact that all of the average *r*s are quite small suggests that each of our subscales does measure something which is fairly distinct from aptitude. Again, it must be pointed out, however, that if the reliabilities of the subscales were greater, the correlations between the subscales and other variables might well be greater.

Relationships Between Attitudes and Achievement

One of the objectives of this study was to investigate, in an exploratory fashion, the relationship between student attitude components and foreign language achievement. It was hoped that one or more of the four attitude subscales would correlate sufficiently highly with student achievement indices to warrant its use in selecting students for foreign language study.

Treating separately the data obtained at each school,[1] partial correlations were computed between attitude subscale scores and each of three achievement criteria, with MLAT scores partialled out. The coefficients obtained at each school for a given pair of variables (e.g., Interest and ALPT-L score) were then averaged and these average *r*s are reported in Table 6.

Table 6

Partial Correlations[a] Between Attitude Subscale Scores and Three Different Criteria of Achievement
(Aptitude Partialled Out)

Attitude Subscale	Criteria of Achievement		
	Final Score (*N*=221)	ALPT-L (*N*=269)	ALPT-R (*N*=269)
Interest	.22*[b]	.20*	.07
Utilitarian Orientation	.05	.10	.11
Xenophilic Orientation	.16*	.21*	.24*
Course Satisfaction	.06	.09	.08

[a]Each *r* reported in this table is the average of those obtained at the various schools. The average was computed using the *z* transformation method.
[b]* indicates significance at the .05 level.

[1]Combining the data from the separate schools into one large group was considered inappropriate since it cannot be assumed that the various sections of the ALPT are equivalent in such matters as difficulty or comparability of standardization groups.

The Interest subscale correlates significantly with two of the achievement criteria (Final Score and ALPT-L). The Xenophilic subscale correlates significantly with all three of the achievement criteria. The fact that the particular correlations just mentioned are statistically significant means that a genuine, though small, association exists between the indicated variables.

None of the correlations in Table 6 is large enough to be of value in individual prediction. It should be pointed out, however, that the low reliabilities of the individual subscales greatly reduces the possibility that any one of them could correlate highly with any other variable. Future research might profitably be devoted to improving reliability of the Interest and the Xenophilic Orientation subscales since with improved reliability, each might be found to correlate sufficiently with achievement criteria to justify its use in student selection procedures.

Specific Satisfactions and Complaints

Information concerning students' specific satisfactions and complaints comes from two sources: the Course Satisfaction subscale, and the three open-end items which solicit least-liked course features, most-liked course features, and suggestions for improvement.

Multiple-Choice Responses

Student responses to two categories of items are shown in Table 7. In the first group (beginning with No. 9), lower mean scores indicate lower satisfaction, higher scores indicate higher satisfaction. The optimums indicated are the respective scale maximums. The lowest scale point is 1 for all these items except No. 9, for which the minimum is 0.[1]

A value of 3 represents the scalar midpoint in each case. In the first group of items, the only characteristics yielding negative reactions at any school were training method and text materials (2.0 each at School 6).

The items are arranged in descending order of variation among schools.[2] Thus, for example, there was considerable disagreement among students at the various schools as to how much they liked their respective text materials (range = 2.3), but very little difference of opinion as to how well they liked their respective instructors as people (range = 0.6). Comparisons of the other sort—among characteristics within one school—can be done only in the grossest way, since the scale values of the response alternatives have not been shown to be exactly comparable for the various questionnaire items.

The second group of items (beginning with No. 21) is similarly arranged in descending order of variation among schools. Thus, students differed in their opinion of the adequacy of the amount of military terminology they were getting (range = 1.8) more than they did regarding the amount of listening comprehension practice in their courses (range = 0.4). The optimum score is the scale midpoint which corresponds to the response "about right." Departure from the midpoint indicates that students thought they were getting too much or too little of that particular feature. The scale for each of these items runs from 1 to 5. Scores greater than 3.0 indicate a perceived insufficiency of the characteristic; scores lower than 3.0, a perceived excess.

In general, the data show that students thought they were not getting enough for 8 of the 13 characteristics listed (e.g., No. 16, target culture; and No. 18,

[1]The figures for Item No. 9 are therefore not directly comparable to the others.

[2]That Item No. 9 shows the largest range may, however, be an artifact of its longer scale.

Table 7

Mean Satisfaction Scores With Various Course Characteristics (Time 1)[a]

Course Characteristic	Mean Score by School								Optimum	Range of Means
	University			Military		Commercial				
	1 (*N*=63)	2 (*N*=61)	3 (*N*=82)	4 (*N*=50)	5 (*N*=18)	6 (*N*=23)	7 (*N*=18)	8 (*N*=9)		
Item No.										
(9) Training Method	4.6	3.7	4.2	4.7	3.4	2.0	3.4	3.3	6.0	2.7
(8) Text Materials	4.3	3.6	4.0	4.1	3.6	2.0	3.7	3.1	5.0	2.3
(2) Tests	4.2	4.0	4.0	3.8	3.7	3.3	3.4	3.0	5.0	1.2
(6) Competence of Instructors	4.6	3.9	4.1	4.3	3.9	3.9	3.8	4.1	5.0	0.8
(3) Scheduling	4.1	3.5	3.9	3.8	3.8	3.3	4.1	3.8	5.0	0.8
(5) Instructors as People	4.5	4.3	4.4	4.6	4.1	4.5	4.2	4.0	5.0	0.6
(21) Amount of Military Terminology	3.2	2.6	3.4	3.0	3.1	3.9	4.2	4.4	3.0[b]	1.8
(16) Amount of Target Culture and Customs	4.3	4.6	3.9	4.1	4.2	4.2	3.8	3.2	3.0[b]	1.4
(14) Pace (Amount of Material per Unit of Time)	2.6	2.7	2.6	2.6	2.0	2.8	3.4	2.8	3.0[b]	1.4
(22) Amount of Language Lab Practice	3.2	3.1	3.6	3.3	4.1	2.8	3.5	3.7	3.0[b]	1.3
(12) Amount of Reading	3.7	3.6	3.3	3.6	2.6	2.9	3.6	3.3	3.0[b]	1.1
(13) Amount of Writing	3.8	3.0	3.1	3.7	2.8	2.7	3.6	2.8	3.0[b]	1.1
(20) Amount of Choral Responding	2.8	2.4	2.8	2.8	3.5	3.2	3.4	3.0	3.0[b]	1.1
(19) Amount of Emphasis on Pronunciation	3.4	3.0	3.1	3.4	3.4	3.3	3.2	2.4	3.0[b]	1.0
(18) Individual Student Recitation	3.4	3.2	3.2	3.6	3.9	3.3	3.1	4.0	3.0[b]	0.9
(10) Amount of Speaking	3.3	3.5	3.2	3.1	3.7	3.2	3.0	3.6	3.0[b]	0.7
(15) Amount of Grammar	3.1	2.9	3.2	3.1	3.4	3.5	3.2	2.8	3.0[b]	0.7
(17) Amount of Time Teacher Talks	2.9	3.0	3.0	2.7	2.4	2.8	3.0	2.7	3.0[b]	0.6
(11) Amount of Listening Comprehension	3.0	3.0	3.2	2.9	2.9	3.3	3.3	3.2	3.0[b]	0.4
Standard Error of the Mean[c]										
Median	.09	.09	.09	.09	.20	.21	.19	.24		
Range	.05–.14	.07–.18	.05–.15	.06–.16	.17–.40	.12–.45	.11–.50	.00–.67		

[a] In some questions the sample size decreases somewhat from those shown, due to failure to respond.

[b] Scores greater than 3.0 indicate a perceived insufficiency of the characteristic. Scores less than 3.0 indicate a perceived excess of the characteristic.

[c] This statistic indicates the stability of the respective sample means. It is generally inversely related to size of sample.

individual recitation). For three features (No. 13, writing; No. 20, choral responding; and No. 11, listening comprehension) opinions were fairly evenly divided between too much and too little. On two characteristics (No. 14, pace of the course, and No. 17, time the teacher talks) students generally thought there was an excess.

Table 8

"Least Liked" Course Features at One or More Schools

Least Liked Feature	Number of Schools[a]
Excessive difficulty, pressure, pace	4
Class administration and organization	4
Drill classes, memorization, dialogues	3
Text materials	1
Structural classes, grammar	1
Student attitudes	1
Instructional staff	1
Other	1

[a]Number of schools, out of eight, where a given feature was among the two most frequently mentioned.

Table 9

"Most Liked" Course Features at One or More Schools

Most Liked Feature	Number of Schools[a]
Satisfaction, glamour, and status in studying (esoteric) foreign language and culture	6
Sense of achievement, challenge, accomplishment	3
Careful organization and method	2
Dialogues, conversation	2
Native speakers, staff attitude and behavior	2
Structure classes and grammar	1

[a]Number of schools, out of eight, where a given feature was among the two most frequently mentioned.

Table 10

Suggestions Most Frequently Mentioned at One or More Schools

Suggestion	Number of Schools[a]
More attention to individual students	4
More emphasis on culture-area study	3
Better class organization and administration	2
Slower pace, less difficulty	2
Better text materials	2
Better language laboratory	2
More emphasis on conversation	1

[a]Number of schools, out of eight, where a given suggestion was among the two most frequently mentioned.

The median standard error of the mean (s_M) is an approximate indicator of the statistical stability of the respective sample means. Some rough comparisons of student perceptions at the three different milieus which the eight schools represent make use of s_M and are given in Appendix E.

Open-End Responses

Three write-in open-end questions provide a second source of data on student likes and dislikes. The major complaint data from these samples of students are set forth in Table 8.[1] One of the complaints—excessive pressure and pace—corroborates the findings for multiple-choice Item 14 given in Table 7. Perceived poor class administration and the more substantive complaint on drill classes, memorization, and dialogues seem about equally prevalent (although not at the same schools, as is pointed out in Appendix E).

Major satisfactions which students report in foreign language learning are listed in Table 9. The major element reported at six of the eight schools was the satisfaction, glamour, and status; at three schools the feeling of challenge and accomplishment involved in foreign language study was noted. One cannot assert that these particular appeals are included in the dimensions of Interest, or Utilitarian or Xenophilic Orientation discussed earlier. It is more likely that

[1]Samples of verbatim student responses from high-frequency categories are given in Appendix G.

one or more other attitudinal factors (i.e., "glamour-status and sense of accomplishment") are meaningful variables in foreign language learning.

The response data for Open-End Question 3 on student suggestions are presented in Table 10. The two major types of comments offered were more attention to individual students and more culture-area study. The desire for expanded culture study is in line with perceived insufficiency of such course content as indicated in Table 7, Item 16.

The responses to the open-end questions in part enabled trainees to express attitudes and opinions not tapped by the multiple-choice items in the questionnaire and in part corroborated some of those same attitudes.

Attitudes and Training Method

The analysis presented in this section seeks to uncover instances of apparent association between teaching techniques and student attitudes. The design of the survey, however, does not permit any conclusive statements about causal effects of method on attitudes. It is reasonable to assume that of the four attitude components measured in this study, two—Interest and Course Satisfaction—would be most influenced by pedagogical factors. The analyses will, therefore, be restricted to these two attitudes.

It was stated earlier that students' attitudes dropped more sharply at some schools than at others as the courses progressed. In fact, the statistical interaction between Times 1 or 2 and schools was found to yield an F ratio of 4.5 ($p < .01$) for Interest scores and 11.1 ($p < .01$) for Course Satisfaction. Of all the groups, Schools 2 and 4 had the sharpest declines both in Interest and in Course Satisfaction (Figure 1).

Although no unequivocal answers emerge from the data, some tentative statements can be made about methodological features[1] that are associated with Schools 2 and 4 to a greater extent than with the other schools. In Schools 2 and 4 there is—

More memorization of dialogues
Less choral-response drilling
More reading of foreign language
Less emphasis on intonation
More use of language laboratories

than in Schools 1, 3, and 5.

A similar comparison may be made on Course Satisfaction between School 1 (which is highest in average score at Time 1) and Schools 6, 7, and 8 (which are on the average lowest). Generally in the low group, when contrasted with School 1, there is—

Exercise in conjugations and declensions
No linguist-informant system
More reading of foreign language
Less choral-response drilling
More use of structural drills
Less use of language laboratories

The only seeming contradiction in these two analyses is in the use of language laboratories. In the first comparison with Schools 2 and 4, they are associated with sharply declining Course Satisfaction; in the comparison with School 1, their absence is associated with lower Course Satisfaction. In both analyses, reading is associated with lower Course Satisfaction.

[1]The methodological features are described in a report by Brown and Fiks on companion research to this study (8).

Volunteering

The group used in the analysis on volunteering for foreign language study consisted of 50 enlisted men studying Russian at School 2. Whether or not a trainee selected foreign language study from among a wide range of alternatives during the armed forces enlistment process appears to be related only to his final score ($p < .10$) among the four criterion measures (Table 11). Volunteering was not found to be predictive of performance on the listening or reading

Table 11

Mean Criterion Data, Aptitude, and Attitudes (at Time 1) for Volunteers and Nonvolunteers[a]

Measure	Volunteers[b] (*N*=28)		*p*	Nonvolunteers[c] (*N*=22)	
	Mean %	SD		Mean %	SD
Final Score					
High Aptitude	86.3	7.2		82.3	10.8
Low Aptitude	79.6	13.1		77.9	11.0
Difference between volunteer groups			<.10		
ALPT-L					
High Aptitude	30.0	6.9		33.7	7.2
Low Aptitude	32.4	9.8		27.8	6.2
Difference between volunteer groups			NS		
Interaction between volunteer and aptitude			<.10		
ALPT-R					
High Aptitude	30.2	6.5		31.0	8.0
Low Aptitude	28.6	9.0		27.8	5.6
Difference between volunteer groups			NS		
Course Completion					
% Completing	88			92	
% Dropped	12			8	
Association between completion and volunteering			NS		
Foreign Language Aptitude (MLAT)	84.1	9.8		79.1	10.9
Difference between volunteer groups			<.10		
Interest	17.4	3.0		16.0	2.7
Difference between volunteer groups			<.10		
Utilitarian Orientation	21.1	2.7		22.1	2.1
Difference between volunteer groups			NS		
Xenophilic Orientation	20.4	3.4		20.3	2.8
Difference between volunteer groups			NS		
Course Satisfaction					
High Aptitude	78.6	5.6		75.0	7.8
Low Aptitude	69.3	8.6		75.5	7.0
Difference between volunteer groups			NS		
Interaction between volunteering and aptitude			<.05		

[a]The significance of difference between means was tested by *t* or *F*; association between course completion and course type was tested by X^2.

[b]The volunteers were students who chose foreign language training during the enlistment process in the U.S. Air Force.

[c]The nonvolunteers included some students who had no choice in being assigned to language study (*N*=6) and some who selected language training from a rather limited range of specialties after completing their Air Force basic training (*N*=16).

portions of the ALPT, nor of the drop-out rate. Therefore, the higher final scores for volunteers would seem to be more related to their higher interest (as shown in Table 11), and the classroom interactions and teacher perceptions they may generate, than to their somewhat higher foreign language aptitude.

The significant interaction effect shown for Course Satisfaction is diagramed in Figure 2. It may be seen that volunteers with high aptitude are more satisfied than those with low aptitude. On the other hand, there appears to be no difference between nonvolunteers of high and low aptitude. Probably low-aptitude volunteers, having high aptitude but little success, express their frustrations in complaints about various course characteristics.

Profile of Interaction Effect of MLAT Score x Volunteering

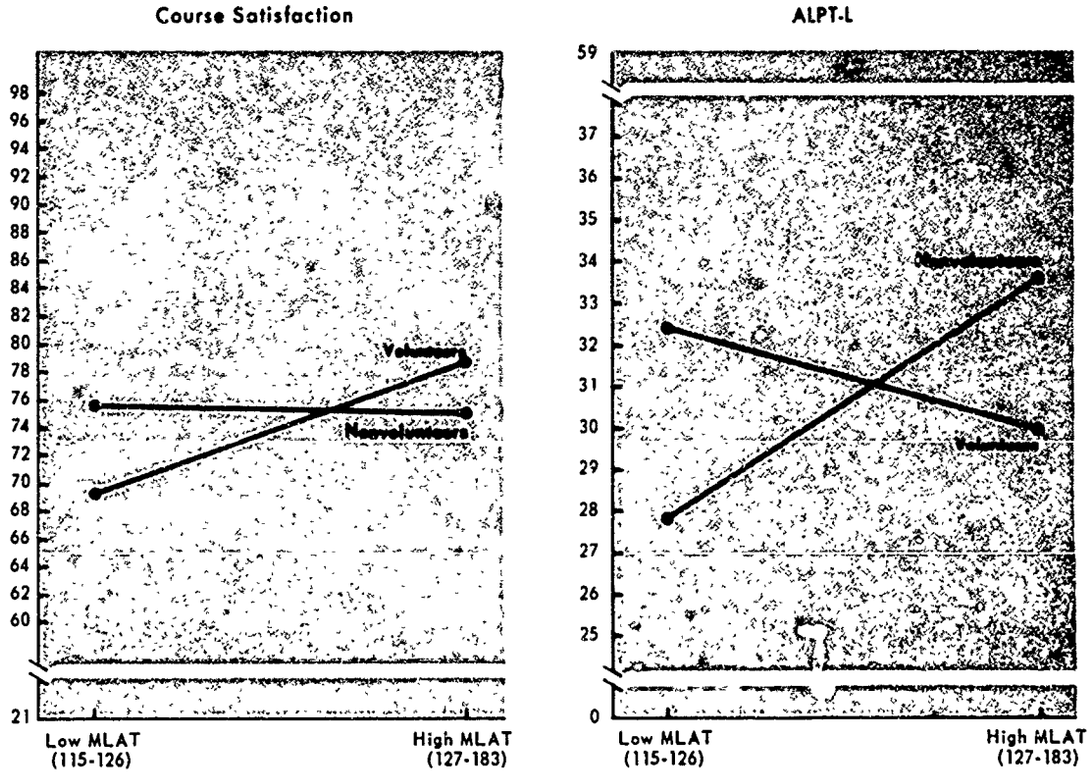

Figure 2

Regarding ALPT-L scores, the data suggest ($p < .10$) a potentially interesting interaction effect between volunteering and foreign language aptitude. Whereas nonvolunteers seem to achieve higher ALPT-L scores if they have greater aptitude (33.7 vs. 27.8), the reverse tendency appears to be the case for volunteers (30.0 vs. 32.4). Corroboration of this finding is necessary, however, before its implications for student selection and assignment can be more fully considered.

CONCLUSIONS

Some tentative interpretations and conclusions seem to be justified by the data collected in the research.

DLI student attitudes toward foreign language study in 1964-1965—

(1) The average level of each of the attitude components measured is quite positive: The students appear to be interested in foreign language study, to be aware of its practical utility, to be imbued with a cross-cultural viewpoint, and to be satisfied with the various course characteristics.

(2) Student attitude and motivation in foreign language courses is better described as a set of specific attitude components rather than as a general motivational state.

Attitude changes as courses progress—

(1) The impressionistic report by teachers to the effect that student attitude diminishes as courses progress is corroborated with respect to Interest, Utilitarian Orientation, and Course Satisfaction.

(2) By contrast, the Xenophilic Orientation of students actually increases slightly during a foreign language course, but not to such a degree as to be statistically significant.

Relationship among attitude components—

(1) The low intercorrelation among the subscales suggests that each measures something relatively independent of the other, but this conclusion must be tempered by the consideration that low subscale reliabilities preclude high correlation between these and other variables.

Relationship between attitudes and aptitude—

(1) Of the four attitude subscales, only Xenophilic Orientation shows a significant correlation with aptitude, and this is extremely low.

Attitude factors as predictors of achievement—

(1) Two of the attitude subscales, Interest and Xenophilic Orientation, were found to correlate significantly though quite modestly with criteria of achievement.

(2) Increasing the reliability of these two subscales might enable them to correlate high enough with achievement criteria to make them of practical use in predicting foreign language achievement.

Course satisfaction—

(1) Among the eight samples of students measured, the greatest variability in satisfaction is in relation to training method used; the greatest homogeneity, with regard to instructors as people.

(2) Satisfaction with the degree of emphasis placed on military vocabulary is most variable from sample to sample; emphasis on listening comprehension, least variable.

(3) The greatest single source-of-gratification theme is the glamour and status associated with study of foreign languages and cultures.

(4) The greatest single complaint theme is excessive difficulty, pressure, and pace of instruction (although most of the complaints are about omissions or deficiencies in the training program rather than "errors" of commission).

(5) The major suggestion themes for improvement are more attention to individual students and more emphasis on culture-area study.

Association between attitudes and training method—

(1) Students who declined most in Interest and Course Satisfaction as their course progressed were in classrooms distinguished from others by more memorization of dialogues, less choral-response drilling, more reading, and less emphasis on intonation.

Volunteering—

(1) Of the four criterion measures, only final scores show a slight superiority (on the borderline of statistical reliability) for volunteers over nonvolunteers. It seems likely that such superiority is related to the volunteers' greater interest in foreign language ($p < .05$) and the classroom behavior it may engender, rather than to aptitude factors.

(2) Among nonvolunteers, students with higher foreign language aptitude achieve higher ALPT-L scores than lower aptitude students do; with volunteers, however, a reverse trend appears in this sample. This reversal effect is on the borderline of statistical stability and requires replication.

(3) Among nonvolunteers, students with higher foreign language aptitude are no more or less satisfied with their courses than are lower aptitude students; with volunteers, however, high-aptitude trainees are more satisfied, whereas low-aptitude students, encountering some degree of frustration, have more complaints about the course.

The data uncovered in this project, though not definitive, would seem to carry a few implications for recruitment, selection, and course administration procedures. For example, in formulating appeals and messages designed to recruit foreign language volunteers, attention might well be given to the "glamour" and "status" which students in this study most often mentioned as a source of satisfaction in their foreign language study.

If student morale and attitudes are deemed important not only to end-of-course criteria, but also to more ultimate criteria of skill maintenance and foreign language utilization (not measured in this project), training administrators might well seek to increase the "culture-area study" content of foreign language courses. In this way, Xenophilic Orientation, which was found to be significantly correlated with achievement criteria, and which was also a major student suggestion theme, could be accommodated.

The small, though significant, correlations found between Interest scores and achievement indices, and between Xenophilic Orientation scores and achievement indices, suggest that future research should be devoted to improving the reliability of these two attitude subscales. Increasing their reliability could conceivably enable them to become useful predictors of foreign language achievement.

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AND
APPENDICES

LITERATURE CITED

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Appendix A

THE LANGUAGE INTEREST SCALE

On the following pages are the items of the Language Interest Scale that were found internally valid in item analysis. The printed instructions to the student give the purpose of the Scale and instructions for taking it. The items are grouped under the four components the scale measures. It should be noted that in the form actually administered to the students, the items were not grouped but intermixed throughout the Scale and included the items from the original pool that were found invalid in item analysis.

(Last Name)	(First Name)	(Initial)	(Rank)

(School)	(Language)	(Class Designation)

This questionnaire is designed to obtain information about students' interests and attitudes concerning the study of foreign languages. It is being administered as part of a research project being carried out for the Department of Defense.

Please answer all questions as carefully and honestly as you can. Remember that your answers will never be seen by anyone except the directors of this research project. Your grades, your career, etc. will never be influenced in any way by your responses to these questions. The only reason we are asking for your name is so that we will be able later to match up statistically your questionnaire with your performance. This is necessary so that we will be able to determine what relationships may exist between interests, attitudes, etc. and achievement in language learning.

Indicate your answers by drawing a circle around the letter of the response which best expresses your feeling. Whenever a question refers to "the_____ language," answer the question with respect to the language you are now studying.

PLEASE ANSWER ALL QUESTIONS.

The Interest Subscale	Code Category
1. If I had the necessary funds and had to pay for this course out of my own pocket, the maximum amount I would be willing to pay is $_____.	
2. If I had the opportunity and were skilled enough in the language I would read newspapers and magazines printed in this language:	
(a) as often as I could	3
(b) fairly regularly	2
(c) probably only occasionally	1
(d) probably never	0
3. After I have been working in the language lab for a short time, I find that I:	
(a) have trouble keeping my mind on the work	0
(b) am interested enough to keep going but not with much enthusiasm	1
(c) become really engrossed in the activity	2
4. If for any reason my attendance in this language course had to be interrupted for a prolonged period (e.g., because of serious illness, a death in the family, or something of the sort), I would try very hard to get reinstated in the course as soon as possible.	
(a) definitely	4
(b) probably	3
(c) possibly	2
(d) probably not	1
(e) definitely not	0
5. I think a knowledge of a foreign language will make me a better educated person.	
(a) agree very strongly	4
(b) agree somewhat	3
(c) not sure	2
(d) disagree somewhat	1
(e) disagree very strongly	0
6. We would like you to indicate how much you are interested in studying the _____ language. In making this estimate, keep in mind such considerations as these: How useful will the language be to you, and how much pleasure you derive from it. Which of the following phrases best describes your interest:	
(a) extremely interested	4
(b) quite interested	3
(c) slightly interested	2
(d) practically no interest	1

The Utilitarian Subscale	Code Category
1. A knowledge of the _____ language may someday be useful in getting a good job in civilian life.	
(a) agree very strongly	5
(b) agree somewhat	4
(c) not sure	3
(d) disagree somewhat	2
(e) disagree very strongly	1
2. A knowledge of the _____ language will probably help me advance in my military career.	
(a) I am certain of it	6
(b) agree very strongly	5
(c) agree somewhat	4
(d) not sure	3
(e) disagree somewhat	2
(f) disagree very strongly	1
(g) nonsense!	0
3. A person who knows only one language is really handicapped in today's military and civilian job market.	
(a) agree very strongly	5
(b) agree somewhat	4
(c) not sure	3
(d) disagree somewhat	2
(e) disagree very strongly	1
4. The more skill I develop in using this language, the better job I'll be able to do on my next assignment.	
(a) agree very strongly	5
(b) agree somewhat	4
(c) not sure	3
(d) disagree somewhat	2
(e) disagree very strongly	1
5. Your chances of getting a responsible, high paying job are better if you can speak another language in addition to your native tongue:	
(a) truer words were never spoken	6
(b) agree very strongly	5
(c) agree somewhat	4
(d) not sure	3
(e) disagree somewhat	2
(f) disagree very strongly	1
(g) hogwash!	0

The Xenophilic Subscale	Code Category
1. I would like to have a better understanding of the _____ people and their way of life.	
(a) agree very strongly	5
(b) agree somewhat	4
(c) not sure	3
(d) disagree somewhat	2
(e) disagree very strongly	1
2. I would like to be able to talk with people from many different countries from all walks of life.	
(a) agree very strongly	5
(b) agree somewhat	4
(c) not sure	3
(d) disagree somewhat	2
(e) disagree very strongly	1
3. The main threat to basic American institutions during this century has come from the infiltration of foreign ideas, doctrines, and agitators.	
(a) agree very strongly	1
(b) agree somewhat	2
(c) not sure	3
(d) disagree somewhat	4
(e) disagree very strongly	5
4. Most of the under-developed countries of the world will probably stay under-developed no matter how hard we try to help them because of the personality characteristics of their people.	
(a) agree very strongly	1
(b) agree somewhat	2
(c) not sure	3
(d) disagree somewhat	4
(e) disagree very strongly	5
5. If I were expected to stay for one year or more in a foreign country, I would make a serious effort to learn the language even though I could get along in English.	
(a) definitely	5
(b) probably	4
(c) possibly	3
(d) probably not	2
(e) definitely not	1

The Course Satisfaction Subscale	Code Category Raw
1. If the course you are now taking were offered again, and a buddy of yours was considering volunteering for it, would you advise him to sign up for it?	
(a) yes, definitely	5
(b) I think so	4
(c) I don't know whether I would or not	3
(d) I think not	2
(e) definitely not	1
2. How satisfied are you with the tests and examinations associated with this course?	
(a) very satisfied	5
(b) fairly well satisfied	4
(c) indifferent	3
(d) somewhat dissatisfied	2
(e) very dissatisfied	1
3. How satisfied are you with the scheduling of your language classes, lab sessions, etc.?	
(a) couldn't be better	5
(b) fairly well satisfied	4
(c) indifferent	3
(d) somewhat dissatisfied	2
(e) very dissatisfied	1
4. How well do you like the language course you are now taking in comparison with all other courses you have ever taken, regardless of subject matter?	
(a) this is one of the most enjoyable courses I have ever taken	5
(b) I would rate this course above average in terms of the amount of enjoyment I get out of it	4
(c) about average	3
(d) below average	2
(e) this is one of the least enjoyable courses I have ever taken	1
5. Disregarding the teaching skill of your instructor(s), what do you think of them as people, i.e., how well do you like them?	
(a) I like them very much	5
(b) I like them pretty well	4
(c) I neither like nor dislike them	3
(d) I dislike them somewhat	2
(e) I dislike them very much	1

	Code Category Raw
6. Disregarding personality characteristics, what do you think of the competence or teaching ability of your instructor(s)?	
(a) extremely high	5
(b) fairly high	4
(c) adequate	3
(d) fairly low	2
(e) extremely low	1
7. The quality of our language lab equipment is:	
(a) excellent	5
(b) pretty good	4
(c) satisfactory	3
(d) rather poor	2
(e) extremely poor	1
8. On the whole, the text materials used in this course are:	
(a) excellent	5
(b) pretty good	4
(c) satisfactory	3
(d) rather poor	2
(e) extremely poor	1
9. Do you think the method of instruction used in this course should be adopted for teaching all foreign languages?	
(a) absolutely, as soon as possible	6
(b) I'm convinced it should be adopted	5
(c) I think so	4
(d) maybe, I'm not sure	3
(e) I think not	2
(f) I'm convinced it should not be adopted	1
(g) absolutely not	0

	Code Category Weighted	Raw
10. The amount of emphasis this course places on learning to <u>speak</u> the language (as opposed to learning to understand, read and write it) is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
11. The amount of emphasis this course places on learning to <u>understand</u> the spoken language is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5

	Code Category Weighted	Raw
12. The amount of emphasis this course places on "reading" is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
13. The amount of emphasis this course places on writing the foreign language is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
14. The general pace of this course is:		
(a) much too fast	1	1
(b) somewhat too fast	2	2
(c) about right	4	3
(d) somewhat too slow	2	4
(e) much too slow	1	5
15. The amount of emphasis this course places on learning rules of grammar is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
16. The amount of attention given in this course to the culture and customs of the _____ people is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
17. The amount of class time in which the teacher is talking (rather than the students) is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
18. The amount of class time in which individual students are reciting is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5

	Code Category Weighted	Raw
19. The amount of concern teachers have for achieving perfection in pronunciation is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
20. The amount of class time spent in choral response drills is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
21. The amount of emphasis the course places on military terminology is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5
22. The amount of time we are required to spend in the language lab is:		
(a) definitely too much	1	1
(b) somewhat too much	2	2
(c) about right	4	3
(d) not quite enough	2	4
(e) not near enough	1	5

Open-End Questions

1. What do you like least of all about the course you are taking?

_____
_____
_____

2. What do you like most of all about the course you are taking?

_____
_____
_____

3. What suggestions for improvements in the course can you make? Think for a moment.

_____
_____
_____
_____

Appendix B

CODING CATEGORIES FOR OPEN-END QUESTIONS

Item 1. Features Liked Least

Code	
	Difficulty (pressure, pace)
1	Excessive
2	Too low (boredom) (Not to include boredom as a long day)
	Listening
3	Excessive emphasis
4	Inadequate emphasis
5	Other aspect (e.g., comprehension tapes)
	Speaking
6	Excessive
7	Inadequate
8	Other (e.g., pronunciation)
	Reading (or literature)
9	Excessive
10	Inadequate
11	Other
	Writing
12	Excessive
13	Inadequate
14	Other (e.g., spelling, translation, dictation)
	Culture (area study)
15	Excessive
16	Inadequate
17	Other
18	Tests and testing (any aspects thereof including grading system)
19	Text materials (any aspects thereof)
20	Homework (any aspects thereof)
21	Structural classes, grammar (any aspects thereof)
22	Memorization, dialogues, drill classes (any aspects thereof including choral recitation, repetition)
23	Student attitudinal factors (e.g., trivial arguments)
24	Class administration and organization (not covered in other categories; e.g., same routine, schedule, class size)
25	Tonal aspects of Chinese
26	Instructional staff members (any aspect thereof)
27	Other (to include Military Emphasis; use L.L. review)
28	Disliked nothing
29	No answer

Item 2. Features Liked Most

Code

1 Sense of achievement, accomplishment, challenge, vocabulary expansion
2 Use of native speakers of target language as instructors
3 (Careful) organization, method, administration
4 Satisfaction, glamour and status in studying (esoteric) foreign language and culture; enjoyment; insight; opportunity to learn
5 Instructional staff attitude and behavior (other than No. 2); informal air
6 (Writing) Chinese characters; writing in general, dictation
7 Small drill classes
8 Pace of course
9 Structure classes and grammar; lecture
10 No other subjects to study; plenty of free time
11 Dialogues, memorization, conversation (to include free conversation periods)
12 Learning something useful (instrumental)
13 College credits
14 Tests and testing
15 Reading
16 Other (to include L.L., Military emphasis)
17 Liked nothing
18 No answer
19 Liked everything about course

Item 3. Suggestions

1 More emphasis on listening-understanding
2 Less emphasis on listening-understanding
3 More emphasis on speaking-conversation, including free conversation classes, everyday words
4 Less emphasis on speaking-conversation, dialogues
5 More emphasis on reading-literature
6 Less emphasis on reading-literature
7 More emphasis on writing-dictation
8 Less emphasis on writing-dictation
9 More emphasis on culture-area study
10 Less emphasis on culture-area study
11 Faster pace; greater difficulty
12 Slower pace; less difficulty
13 Tests and test procedure
14 More emphasis on grammar-linguistics-structure
15 Less emphasis on grammar-linguistics-structure
16 More homework; more mandatory study
17 Less homework; less memorization
18 Other aspects of homework
19 More mission-oriented (vocabulary) (assignment)
20 Physical environment aspects (excluding class size)
21 Better text materials; make texts available
22 More attention to individual students; smaller classes

Code

23	Better student selection
24	More opportunity for optional study
25	No suggestions
26	No answer
27	Other
28	Teacher characteristics or behavior
29	Class administration and organization (e.g., additional lectures, scheduling of classes)
30	L.L. (other than No. 24); electronic devices; tapes

Appendix C

BIOGRAPHICAL FACTORS

It should be noted that various biographical factors are necessarily confounded with each other as well as with training system features (Appendix E). For example, the biographical factor "military rank" is confounded with "type of course" a student may be enrolled in. Similarly, a student's "age" is indirectly related to the type of training milieu into which he is thrust. Thus, it must be fully recognized that when comparisons are made for any one predictor variable, the analysis "collapses" on all other factors, unless otherwise indicated. Demonstrable effects on the criteria would have to be especially potent in order to appear under such circumstances, but do not permit unequivocal interpretation.

Table C-1

Correlations of Age With Achievement and Aptitude
(*N*=38)

Age Correlated With:	Correlation	*p*
Final Score	.20	NS
ALPT-L	-.22	NS
ALPT-R	-.18	NS
Foreign Language Aptitude	-.10	NS

Age

This analysis is based on 38 trainees studying Mandarin Chinese at one school. As Table C-1 indicates, none of the correlations between student age and achievement are reliably greater than zero. The age range being dealt with here was 17 to 34 years with a median age of 22 years. The correlation between foreign language aptitude and age was found to be negative and low, which tends to agree with previous findings (9, 10).

Military Rank

No reliable differences in means between enlisted men and officers on Final Score or ALPT-L are apparent from the data presented in Table C-2. However, officers, on the average, perform significantly better than enlisted men on the reading subtest of the ALPT, despite the fact that the latter have a higher mean foreign language aptitude. This may be due to the fact that most of the enlisted men are enrolled in courses which stress aural comprehension, and give relatively little attention to reading. On the fourth criterion, Percent Completion, there is a slight tendency for the officer group to contain a larger percentage of completers.

With regard to the amount of variability among enlisted men as compared to that among officers, on two of the three criteria for which this analysis can be made, enlisted men differ more from one another than do officers. Standard deviations (SDs) for the two groups, and the results of tests of the statistical significance of the differences between the two groups are given in Table C-3.

For Final Score and ALPT-L, the distributions of enlisted men's scores around their mean scores was reliably more widespread than the distributions of officers' scores around their mean scores. For ALPT-L, too, the standard deviation for enlisted men was greater than that for officers, but the variance ratio (F) was not significantly different from 1.00.

The greater uniformity in criterion scores among officers cannot be ascribed to initially greater uniformity in foreign language aptitude, for the reverse is the case. The MLAT standard deviation for officers was reliably smaller than for enlisted men (Table C-3).

Table C-2

Mean Aptitude, Attitudes (at Time 1), and Achievement Scores for Enlisted Men and Officers[a]

Measure	Enlisted Men		Officers		p
	N	Mean	N	Mean	
Foreign Language Aptitude (MLAT)	234	127.8	33	117.9	<.05
Interest	282	17.5	36	16.7	NS
Utilitarian Orientation	282	21.4	36	19.5	<.01
Xenophilic Orientation	281	20.7	36	22.0	<.01
Course Satisfaction	281	74.3	36	66.3	<.01
Final Score (%)	203	84.2	13	86.7	NS
ALPT-L	229	40.4	34	42.4	NS
ALPT-R	229	31.0	34	44.7	<.01
Course Completion	283		38		
% Completing		83		95	
% Dropped		17		5	
Association between Course Completion and Rank					<.10

[a]The significance of difference between means was tested by t; the approximation suggested by Cochran and Cox (11) was used whenever variances were heterogeneous. Association between course completion and rank was texted by X^2.

Concerning attitudes early in the course, enlisted men perceived foreign language study as a way to further their job goals to a greater extent than did officers (Utilitarian Orientation, Table C-2). Enlisted men also reported greater satisfaction with the characteristics of their courses than officers did, although it is unclear to what extent this may have been mere verbalization of socially approved responses by the former group.

Table C-3

Standard Deviations for Enlisted Men and Officers[a]

Measure	Enlisted Men			Officers			p
	N	SD	df	N	SD	df	
Final Score	201	8.6	202	11	4.7	12	<.05
ALPT-L	227	9.5	228	32	8.2	33	NS
ALPT-R	227	11.6	228	32	8.1	33	<.01
FL Aptitude (MLAT)	232	15.0	233	31	21.9	32	<.01

[a]The difference between standard deviations was tested for significance by means of an F test of the variance ratio.

Officers, by contrast, were found to be more xenophilic than enlisted men. Since officers are considerably more likely to be sent into the foreign language community under the Military Assistance Program or attached to a U.S. Embassy abroad, their responses indicating greater receptivity to, and identification with, foreign cultures seem appropriate.

Appendix D

FOREIGN LANGUAGE APTITUDE

Quite clearly, the range of student aptitude for foreign language learning is necessarily restricted in these samples, since we are dealing only with trainees who have previously been screened and selected largely on the basis of such test performance. The minimum cut-off score required for assignment to many foreign language training programs of the DLI was generally 115 on the Modern Language Aptitude Test. This score represents the 60th percentile on a normative group of Air Force enlisted men.

Even with such a restriction, stable, positive relationships were found between aptitude and the three achievement measures in all but one school[1] (Table D-1).

Table D-1

Relationship Between Foreign Language Aptitude (MLAT) and Three Criterion Measures

School	*N*	Product-Moment Correlation[a] Between MLAT and:		
		Final Score	ALPT-L	ALPT-R
1	59	.04	.06	−.22
2	52	.35***	.39***	.33***
3	60	.43***	.32***	.27*
4	40	.27	.41***	.32*
5	14	.48*	.49*	.59**
6,7,8	48	[b]	.33**	.29*

[a]* indicates $p<.05$, one-tailed test; ** indicates $p<.02$, one-tailed test; *** indicates $p<.01$, one-tailed test.

[b]No final scores were available.

[1]School No. 1 had more rigid selection criteria than the rest, involving performance evaluation during a day-and-a-half "trial course." Consequently, MLAT scores of students at School No. 1 show less variance than at other schools.

Appendix E

TRAINING SYSTEM CHARACTERISTICS

These analyses will consider the relationships between the place, the target language, and the type of course on the one hand, and the end-of-course criteria and student attitudes in the latter parts of the courses on the other.

Milieu

The eight schools sampled can be grouped into one of three different environments: military installations, university settings, and commercial language schools. The results of training differed, both in criteria performance and in later attitudes, from one type of milieu to another (Table E-1). The initial differences in the foreign language aptitude of incoming students (highest for the university group) cannot account for differences in achievement on the ALPT-L and ALPT-R, which is highest for the military installation group. Nor can it account for differences in course completion percentage, which is highest in the commercial-school samples.

Table E-1

Mean Aptitude, Attitudes (at Time 2),[a] and Criterion Data for Three Different Training Milieus

Measure	Military Installation (N=54-69)	Military-University Difference	University Campus (N=163-207)	University-Commercial Difference	Commercial School (N=48-50)	Commercial-Military Difference[b]
Foreign Language Aptitude	124.6	$p<.05$	130.7	$p<.01$	114.9	$p<.05$
Interest	16.9	NS	17.1	$p<.01$	15.8	$p<.05$
Utilitarian Orientation	19.3	$p<.01$	21.2	$p<.01$	18.7	NS
Xenophilic Orientation	22.2	$p<.01$	20.8	NS	21.0	$p<.05$
Course Satisfaction	65.7	$p<.01$	72.6	$p<.01$	63.8	NS
ALPT-L[c]	49.1		39.3		36.0	$p<.01$
ALPT-R[c]	45.0		27.2		37.9	$p<.01$
Course Completion						
% Completing	83		81		100	
% Dropped	17		19		0	
Association Between Course Completion and Milieu						$p<.01$

[a]Except that the attitudes of commercial school students were measured only once, in the first half of their respective courses.

[b]The significance of difference between means was tested by F, association between course completion and milieu was tested by χ^2.

[c]These data have been adjusted through covariance analysis to eliminate any effects of different course lengths.

Regarding attitudes at Time 2, it is the university group that scores highest in Interest, Utilitarian Orientation, and Course Satisfaction. The military installation group is more xenophilic in their attitudes than the other two groups. The

relative order of the three milieus on each of the four attitude components at Time 2 does not involve any dramatic shifts from what the order was early in the course.

Some analysis may also be made of students' specific satisfactions and complaints, as these may be found more prevalent in one milieu than another. For example, referring back to Table 7 (p. 15), it appears that commercial school students, as a group, tend to be less well satisfied with the training methods (Item 9), text materials (Item 8), and tests (Item 2) than are students at university campuses or military installations. No differences appear in the data insofar as opinions on instructor competence, scheduling, and instructors as people are concerned.

On the second group of items in Table 7, it is even more difficult to make comparisons among milieus. It appears, however, that the commercial-school students think that they are getting insufficient military terminology (Item 21). Also, as a group, they seem to perceive the amount of area study they are doing (Item 16) and the general pace of the courses (Item 14) as somewhat closer to the optimum than do students in the other two milieus. Trainees in the university sample think they are getting somewhat too much choral responding (Item 20), but perceive the amount of time the instructor is speaking (Item 17) as closer to optimal than do the other two samples. No milieu differences are readily seen on the remainder of the course characteristics (Items 22, 12, 13, 19, 18, 10, 15, and 11). Amount of listening comprehension (Item 11) is the course characteristic that produced the least student dissatisfaction (i.e., least divergence in the school means from the optimum).

Similar data are presented in Tables E-2, E-3, and E-4 for least-liked features, most-liked features, and student suggestions. The first three negative comments categories (Table E-2) seem to be somewhat associated with

Table E-2

Percentage of Student Responses on Two Least-Liked Features, by School and Milieu (Time 1)

Course Feature Liked Least	Percent of Responses[a]							
	University Campus			Military Installation		Commercial School		
	School 1 (72)	School 2 (71)	School 3 (93)	School 4 (52)	School 5 (24)	School 6 (33)	School 7 (23)	School 8 (8)
Excessive difficulty, pressure, pace	28	14	16	–	46	–	–	–
Class administration and organization	–	–	–	–	12	21	22	25
Drill classes, memorization, dialogues	10	21	–	17	–	–	–	–
Text materials	–	–	–	–	–	27	–	–
Structural classes, grammar	–	–	17	–	–	–	–	–
Student attitudes	–	–	–	15	–	–	–	–
Instructional staff	–	–	–	–	–	–	–	25
Other	–	–	–	–	–	–	17	–

[a]A dash indicates that that feature was not among the two most numerous response categories at that school. The numbers in parentheses indicate the number of responses at that school.

Table E-3

Percentage of Student Responses on Two Most-Liked Features, by School and Milieu (Time 1)

Course Feature Liked Most	Percent of Responses[a]							
	University Campus			Military Installation		Commercial School		
	School 1 (80)	School 2 (68)	School 3 (104)	School 4 (66)	School 5 (19)	School 6 (28)	School 7 (21)	School 8 (8)
Satisfaction, glamour, and status in studying (esoteric) foreign language and culture	14	22	25	20	37	21	–[a]	–
Sense of achievement, challenge, accomplishment	14	–	14	12	–	–	–	–
Careful organization and method	–	–	–	–	16	–	29	–
Dialogues, conversation	–	–	–	–	–	18	24	–
Native speakers as instructors	–	21	–	–	–	–	–	–
Instructional staff attitude and behavior	–	–	–	–	–	–	–	25
Structure classes and grammar	–	–	–	–	–	–	–	25

[a]A dash indicates that that feature was not among the two most numerous response categories at that school. The numbers in parentheses indicate the number of responses at that school.

Table E-4

Percentage of Two Most Frequently Mentioned Student Suggestions, by School and Milieu (Time 1)

Suggestion	Percent of Responses[a]							
	University Campus			Military Installation		Commercial School		
	School 1 (102)	School 2 (97)	School 3 (133)	School 4 (66)	School 5 (33)	School 6 (62)	School 7 (37)	School 8 (15)
More attention to individual students	15	–[a]	–	–	–	10	16	13
More emphasis on culture-area study	14	11	–	12	–	–	–	–
Better class organization and administration	–	14	–	–	27	–	–	–
Slower pace, less difficulty	–	–	12	–	12	–	–	–
Better text materials	–	–	–	–	–	23	22	–
More emphasis on conversation	–	–	11	–	–	–	–	–
Better language laboratory	–	–	–	–	–	10	–	27
None	–	–	–	12	–	–	–	–

[a]A dash indicates that that feature was not among the two most numerous response categories at that school. The numbers in parentheses indicate the number of responses at that school.

different training milieus. For example, excessive pace seems associated with university and military milieus but not commercial, whereas poor class administration and organization is characteristic of the last-named milieu, but not the first two.

There is almost no evidence of association between specific factors students found satisfying and particular milieus (Table E-3). The single exception may be that dialogues and conversations were positively perceived primarily by commercial-school students.

With regard to suggestions (Table E-4), the desire for more individual attention was particularly prevalent among commercial-school students, greater emphasis on culture factors particularly among the university group. The remainder of the suggestion categories seem fairly idiosyncratic to particular schools. Some internal consistency is demonstrated in these results, in that Schools 3 and 5, where slower pace was a frequent suggestion (Table E-4), are also the schools in which students thought the pace was fastest (Table 7, Item 14).

Student Attitudes As Related to Language Being Studied

Student attitudes as related to languages being studied are described in Table E-5 for each of the four subscales. Other calculations (not presented) indicate that the various groups of students represented in this table do not differ significantly from one another in aptitude (MLAT) scores. Consequently, any differences which appear in Table E-5 must be attributable to the nature of the language under study.

Table E-5

Student Attitudes Categorized by Languages (Time 1)

Language	*N*	Interest		Utilitarian Orientation		Xenophilic Orientation		Course Satisfaction	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Chinese (Mandarin)	113	18.0	2.8	22.0	3.0	21.2	2.5	76.4	9.3
Russian	160-161	17.4	3.1	21.2	3.3	20.6	2.8	74.0	9.8
Spanish	10	15.3	2.4	18.5	5.6	21.7	2.2	66.7	8.9
French	9	15.0	2.5	17.6	4.4	19.4	2.3	66.3	8.8
Japanese	8	14.6	2.2	17.8	4.7	19.6	2.1	47.2	7.8
Vietnamese	11-12	17.2	2.0	19.8	2.7	22.4	2.1	65.2	7.3
Other	11	16.1	2.1	19.5	3.6	21.3	3.0	69.6	13.8
F		2.7		3.4		2.2		12.9	
p		<.05		<.01[a]		<.05		<.01	

[a]Although the variances involved were found nonhomogeneous by Bartlett's Test ($p<.05$), the *F*-test is considered to be robust enough to provide an adequate test on the means.

It is apparent that students of Chinese ranked highest in Interest, Utilitarian Orientation, and Course Satisfaction. They ranked second highest in Xenophilic Orientation, topped only by the students of Vietnamese. The fact that the latter group might anticipate combat duty in Vietnam readily explains the very high Utilitarian Orientation of this group.

Course Type

Although students in the Regular Courses surpassed those in Auditory Comprehension Courses (ACC) in reading skill, there was no reciprocal advantage for the ACC group on the Listening part of the ALPT (Table E-6). Neither did a stable difference in Final Scores appear between the two groups, the higher mean aptitude of the ACC group notwithstanding. Moreover, students in Regular Courses completed their courses significantly more often than did students in Auditory Comprehension Courses.

Table E-6

Mean Aptitude, Attitudes (at Time 2), and Achievement Scores for Regular and Auditory Comprehension Courses[a]

Measure	Auditory Comprehension Course		Regular Course		*p*
	N[a]	Mean	*N*[a]	Mean	
Foreign Language Aptitude (MLAT)	197	129.5	75	119.1	<.01
Interest	237	16.7	28	16.9	NS
Utilitarian Orientation	237	20.9	28	18.0	<.01
Xenophilic Orientation	237	20.9	28	22.2	<.02
Course Satisfaction	237	71.1	28	68.9	NS
Final Score	195	84.1%	25	86.2%	NS
ALPT-L	192	41.1	76	39.9	NS
ALPT-R	192	30.0	76	40.1	<.01
Course Completion	246		80		
% Completing		80		96	
% Dropped		20		4	
Association between Course Completion and Course Type					<.01

[a]The significance of difference between means was tested by *t* or *F*; association between course completion and volunteers was tested by Fisher's Exact Probability test.

Differences on two attitude subscales were shown to exist (Table E-6). Both were in a hypothesized direction and parallel closely the military rank differences discussed earlier. The Auditory Comprehension group (who were exclusively enlisted men) perceived its foreign language courses as having greater utility and expressed a lower Xenophilic Orientation than the Regular Course Group (which contained some enlisted men and some officers). No differences appeared between the two groups in terms of either Interest or Course Satisfaction.

Appendix F

TEST-RETEST CONTROL

Use of the attitude questionnaire test-retest paradigm raises a question of the extent to which the first administration of the questionnaire may have sensitized the students. In order to get some determination of the effects, if any, of the first administration on readministration responses (about 23 weeks later), a control group (N = 44) at School 2 was also given the questionnaire at the second time point. The control group had not previously been given the attitude scale.

The regular School 2 group was then compared with the control group in terms of mean scores of the four subscales of the Language Interest Scale. The hypothesis was that a significant mean difference between the two groups would constitute a demonstration of bias due to the first administration. This test is not completely definitive, however, because intact classes of students with no random assignment were necessarily compared here.

The mean scores of both groups for each of the four subscales is given in Table F-1. The data on three of the subscales tend to support the assumption that the first administration did not bias retest responses. On the fourth, Utilitarian Orientation, there is some evidence that the first administration of the questionnaire may have made the pragmatic aspects of foreign language study more salient for the trainees, and that this attitude, therefore, dropped off less than it might have otherwise.

An additional point is that the regular group had completed 92% of their course (see Table 1) at the time of the second administration. The control group at the same time point had completed only 76% of their course. Thus, an even greater difference in the means of the two groups mentioned might have resulted had the control group responded to the questionnaire when they had completed 92% rather than only 76% of the course. The general finding concerning significant drop-offs in the perception of the utility of foreign language study from early to late in courses (see Table 2) would have been thrown in jeopardy if the mean Utilitarian Orientation score for the regular group at School 2 had been lower instead of higher than the score for the control group at Time 2.

Table F-1

Mean Attitude Scores for Regular and Control Groups

Subscale	Regular Group Means (N=53)	Control Group Means (N=44)	p
Interest	15.3	15.3	NS
Utilitarian Orientation	21.2	19.6	<.02
Xenophilic Orientation	20.6	20.8	NS
Course Satisfaction	66.2	69.7	NS

[a]The significance of difference between means was tested by t.

Appendix G

SAMPLE OF VERBATIM RESPONSES TO OPEN-END QUESTIONS[1]

Features Liked Least

Category 1. Difficulty (Pressure, Pace): Excessive

School 1

1. Being under constant stress to do good (sic) in the course.
2. The course progresses a little bit too fast.
3. The accelerated program; given material too fast.
4. The speed (of course) is not especially too fast for me, but it is for many.

School 2

1. I think that we are given the material at too fast a rate to grasp it.
2. It is too fast . . . they move right along no matter what happens.
3. I don't like the fast pace for learning a language, although it may be necessary for the USAF's purpose.
4. The rapid pace leaves little time to concentrate on the areas to which I should give special attention.

Category 19. Text Materials (any aspects thereof)

School 6

1. The lack of text materials.
2. No references such as dictionaries or grammar rules.
3. Not enough material is furnished.
4. Inadequate text materials.

Category 22. Memorization, Dialogues, Drill Classes (any aspects thereof)

School 1

1. Memorization.
2. Memorization classes—I don't feel they help the student a great deal.
3. Too many drill classes.
4. Uninteresting drill classes.

School 2

1. Excessive time spent on repetition.
2. Memorization of dialogues.
3. Memorization of dialogues; I see no reason.
4. I believe I dislike the overabundance of chorus drilling most.

[1]The sample responses are those mentioned with the greatest frequency. Appendix B contains the full list of categories.

School 4

1. I like the daily memorizations least although they are very helpful at times.
2. I think too much time is spent on memorization.
3. Choral response from the class—the teacher can't pick up one's mistakes as well.
4. So much repetition from hour to hour, day to day, week to week.

Category 23. Student Attitudinal Factors

School 4

1. Impersonal.
2. Time wasted over students' questions about obscure points.
3. The competition between students agitated by the teachers.
4. The insecure feeling that arises when you cannot grasp what the instructors are teaching.

Category 24. Class Administration and Organization (not covered in other categories)

School 2

1. Too many class hours and not enough lectures.
2. The lack of emphasis on giving a vocabulary that could be used by beginning students in order to "get a feeling for" the language.
3. The lack of practical application.
4. Some areas are not covered enough while other areas are covered too much.

School 6

1. Complete dependence upon the total immersion lab method.
2. In my class half of the class is from Army Special Forces and the other half is from Army Security Agency. The Special Forces require fluency in the spoken language while the Security Agency requires better knowledge of the written language.
3. The method.
4. We spend too much time trying to read and write "Kon-zi" whereas in our future assignments we will be speaking and listening only.

School 7

1. The shortness of the course—it won't make a person without any language background fluent.
2. There is a great deal of Spanish which will not be covered in this short course.
3. Too large a class.
4. Students with prior language courses are mixed with students without prior language courses.

School 8

1. The class size does not permit sufficient time for students to adequately practice speaking the language.
2. Too large a class for learning to speak the language.

Category 26. Instructional Staff Members (any aspect thereof)

School 8

1. One instructor is too much a stickler for pronunciation thus slows down the instruction.
2. Conversation instructor is too impatient.

Category 27. Other

School 7

1. Classroom space is too small.
2. Lack of military vocabulary.
3. There is no language lab.
4. Course is too long.

Category 21. Structural Classes, Grammar (any aspects thereof)

School 3

1. I think more time should be spent explaining and drilling grammar. I don't like the lack of grammar.
2. The grammar—I never liked grammar even in English.
3. The amount of time spent on grammar in class.
4. Not enough clearly defined grammar instructions.

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13. ABSTRACT

Intellectual and aptitude factors do not wholly account for differences in achievement in foreign language classrooms. Some aspects of student attitudes and motivation were investigated to determine their role in such learning. Data were collected from about 300 military students of foreign languages in the first and again in the last third of their courses at eight military, university, and commercial language schools. Three types of data were collected: (a) attitude-motivational (Interest, Utilitarian Orientation, Xenophilic Orientation, and Course Satisfaction, by means of a 41-item Language Interest Scale; Volunteering data); (b) secondary data (biographical, aptitude, and training system factors); and (c) criterion measures (final course scores, Army Language Proficiency Test-Listening and -Reading scores, and course completion figures. These data were analyzed, associations were identified, and some student selection and course management implications were drawn.

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Attitude						
Foreign Language Training						
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Training Motivation						

END